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RODA & ANDROLIA

Amott 7/2
NO. 998 P. 1

5-3-03

211A 3139

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

GENICHI KIMIZUKA

Serial No: 09/899,608

Filed: July 5, 2001

For: GEAR MADE OF RESIN, AND
MOLD STRUCTURE

Art Unit: 3682

Examiner: Bradley J. Van Pelt

AMENDMENT

FAX RECEIVED

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

MAY 02 2003

Official

GROUP 3600

Dear Sir:

In response to the Office Action dated February 3, 2003, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Please replace the last paragraph bridging pages 1 and 2 with the following rewritten paragraph:

--A gear made of a resin is conventionally used in a power-transmitting mechanism for a duplicator, an automobile part and the like for the purpose of reducing the part cost and the weight and the operational sound. The gear made of the resin is formed into a predetermined lightened shape by an injection molding, but the deformation such as a warpage and a sink may occur due to a difference between the amounts of material shrunk at molded portions. For example, as shown in Figs. 1 to 3, in a gear 1 formed of a resin so that a boss 3 and a rim 5 are connected to each other by a web 4, the amount of shrinkage or contraction of a connection 7 between the rim and the web 4 and the amount of shrinkage of an end of the rim 5 are different from each other and for this reason, there is a possibility that a sink (indicated by a broken line L1) is produced, i.e., the connection 7 between the rim 5 and the web 4 is deformed so that it is recessed. If such a sink is produced, the tooth flank accuracy is degraded. In a gear 1 formed of a resin with a web 4 offset toward one of ends of a rim 5, as shown in Fig. 3, the following disadvantage is encountered: A connection 7 between the web 4 extending radially outwards